



MSD

May 27, 2004

Mr. Femi Akindele
Remedial Project Manager
Kentucky/Tennessee Section
U.S. Environmental Protection Agency
Region IV
61 Forsyth Street
Atlanta, GA 30303

**Re: Result of Air Quality Monitoring - FY 04, Fourth Quarter (FY04-4Q),
Lees Lane Superfund Site, Jefferson County, Kentucky, Administrative Order on
Consent, USEPA Docket No-91-32-C**

Dear Mr. Akindele

In accordance with paragraph 11, under Reporting Requirements, of the subject Consent Order and Attachment 1, Operation and Maintenance Plan For Post-Removal Site Control at the Lee's Lane Landfill Site. Section 4.2, Air Quality Monitoring, attached for your information and files is one photocopy each of the following items, prepared by URS Corporation, 1600 Perimeter Park Drive, Suite 100, Morrisville, North Carolina 27560 and received by MSD on May 25, 2004.

1. URS Corporation letter dated May 20, 2004, 2 pages.
2. Figure 1, Lees' Lane Landfill, Sampling Locations, 1 page.
3. Table 1, TO-15 Data Summary for Ambient Air Samples at the Lees' Lane Landfill, Sampling date: April 02, 2004, 1 page.
4. Table 2, On-Site Meteorological Data, Sampling date, April 02, 2004, 1page.
5. Table 3, TO-15 Data Summary for Gas Monitoring Well Samples at the Lees' Lane Landfill, Sampling date: April 02, 2004, 1page.



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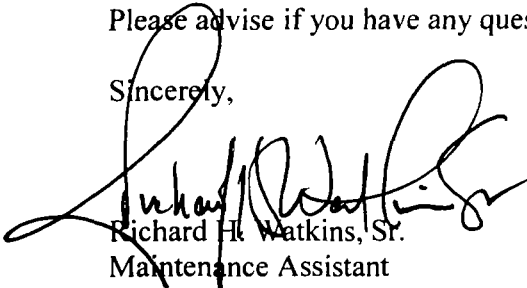
Mr. Femi Akindele

May 27, 2004

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Please advise if you have any questions concerning the attached information.

Sincerely,

A handwritten signature in black ink, appearing to read "Richard H. Watkins, Sr.", is written over the typed name and title.

Richard H. Watkins, Sr.
Maintenance Assistant

RHW/rw
Lees-04-4Qtr

Enc.

cc: Kentucky National Resource Environment Protection Cabinet
Mr. Ken C. Logsdon, Division of Waste Management
H. J. Schardein, Executive Director
Lees Lane File



31824318.3501

May 20, 2004

Mr. Dan Sammons
Chief Chemist
Louisville Metropolitan Sewer District
4522 Algonquin Parkway
Louisville, KY 40211

Dear Dan:

Enclosed is the summary analytical report for the ambient air and gas monitoring well samples collected at the Lee's Lane Landfill site on 02 April 2004 (Quarter 35).

A map of the site, labeled with the sample collection locations for your reference, is shown in Figure 1. Table 1 is a tabular summary of the ambient samples with the primary analytes required for submission to EPA. All ambient air samples indicate low levels of the primary analytes at a similar level compared to the last reporting quarter. Quality control data from the laboratory replicates are of high quality. However, field blank levels of methylene chloride exceed those of two of the six gas well samples, which are below the reported analytical detection limit. Further, the laboratory reported that the Gas Well #2 (Sample ID: LMSD-35-G2) canister was received with a pressure reading of 0.0 in H_g. The canister was pressurized in the laboratory, but dropped to ambient pressure overnight. The sample was analyzed as a precaution and the analysis indicated the canister contained ordinary room air. Therefore, the results of sample LMSD-35-G2 are reported as NR.

The sampling locations were chosen based on a combination of prevailing on-site meteorology and accessible sites in the adjacent residential neighborhood per the standard sampling protocol. The meteorological conditions were mild (41-61^oF) with a moderate wind (8.1-15 mph) during the sampling day. The information displayed in Table 2 was obtained from the Louisville Airport National Weather Service Station, which is representative of the sampling site. The ambient air samples were collected in Summa canisters positioned 3-5 feet above ground level, integrated over an approximate 7-hour collection period.

The methane analysis was performed by GC/FID using a separate analytical system from the TO-15 analysis employed at STL in Austin. The TO-15 analytical methodology using Gas Chromatography/Mass Spectrometry (GC/MS) was employed. Samples were handled with standard laboratory chain-of-custody procedures. Sample canisters and flow controllers were cleaned and blanked using method TO-12 for total nonmethane hydrocarbons prior to field deployment. With the exception of the aforementioned duplicate sample (LMSD-35-G2), all samples were successfully collected and analyzed for methane and the TO-15 target analytes. Quality control parameters of precision

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Mr. Dan Sammons

05/20/04

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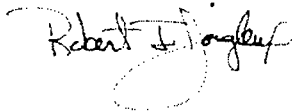
(repeatability) and spiking of surrogate compounds meet internal URS and project-required specifications.

The reliability of this data set can be characterized as good, based on the repeatability (analytical precision), surrogate spike recoveries, blank levels and the relatively few number of unresolved interfering peaks in the sample chromatograms. The field blank canister reported positive hits for methylene chloride (0.098 ppb) and toluene (0.088 ppb). These concentrations are similar to those reported for the September 2003 sampling period. The reported results have not been blank corrected in attached tables per our standard project procedure.

Table 3 is a tabular summary of the gas well samples with the primary analytes required for submission to EPA. The gas monitoring wells were screened with a photoionization detector (PID) to test for the presence of volatile organic compounds (VOCs) prior to field sample collection. No significant VOC concentrations were detected with the PID. Analytical results from gas wells G3, G4, G5L, and G5R were similar to those reported from the previous sampling event. Relative to the other wells, gas well G1 contained unusually high concentrations of several analytes, especially methane (20,300 ppm_v), benzene (21.1 ppb_v), and tetrachloroethene (85 ppb_v). These concentrations indicate that the potential for significant migration of landfill gas landfill in the vicinity of Well #1. The operation of the blower on the gas collection system at the site should be checked immediately to ensure that the collection system is function properly.

URS appreciates the opportunity to assist your staff with this project. Please advise me at (919) 461-1242 if you have any questions.

Sincerely,



Robert F. Jongleux
Project Manager

Enclosure

c: Rich Watkins, LMSD
Kris Fields, URS/LOU
Project File/Task 35

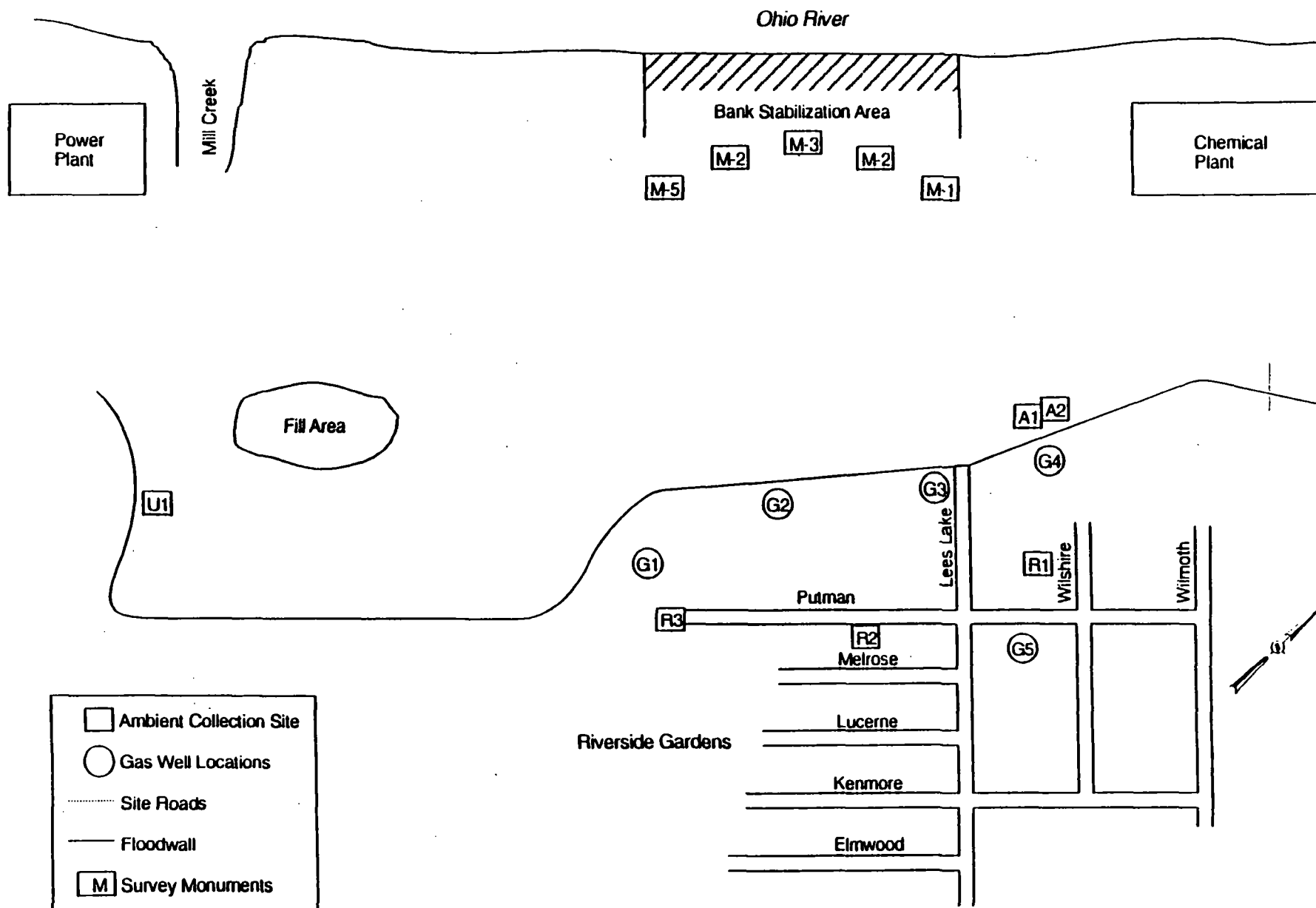


Figure 1. Lees Lane Landfill Sampling Locations

TABLE 1

**TO-15 DATA SUMMARY FOR AMBIENT
AIR SAMPLES AT THE LEE'S LANE LANDFILL
SAMPLING DATE: 02 APRIL 2004**

Sample ID	Ambient Air Samples					
	U1	A1	A2	R1	R2	R3
Canister ID	RA2089	RA2033	RA2075	RA2025	RA2034	RA2029
Dilution Factor	3.38	2.63	3.12	2.58	2.83	3.05
Location	Upwind	On-site	On-site(dup)	Residential	Residential	Residential
Veriflow ID	A176633	A168475	A134120	A218961	A218997	A218962
Compound (ppbV)						
Benzene	ND	0.104	ND	0.13	0.12	0.15
Methylene chloride	0.44	0.08	ND	0.09	ND	0.22
Toluene	0.79	0.17	0.06	0.25	0.14	0.37
Vinyl chloride	ND	ND	ND	ND	ND	ND
Xylene (Total)	ND	ND	ND	ND	ND	ND
Methane (ppmV)	9.7	13.0	11.8	13.0	11.9	12.0

NR= Not Reported (canister failed acceptance criteria)

ND = Non Detect

TABLE 2

LOCAL METEOROLOGICAL DATA
SAMPLING DATE: 02 APRIL 2004

Time	Barometric Pressure (in Hg)	Temperature (F)	Dewpoint (F)	Wind Direction (from)	Wind Speed (mph)	Observation
6:56	29.95	41.0	30.0	NW	9.2	Overcast
7:56	29.98	41.0	30.9	NW	8.1	Mostly Cloudy
8:56	29.98	41.0	32.0	WNW	9.2	Light Rain
9:56	29.99	45.0	30.9	NW	9.2	Overcast
10:56	29.99	48.0	30.9	WNW	9.2	Overcast
11:56	29.98	52.0	32.0	NW	15.0	Overcast
12:56	29.96	55.0	34.0	North	12.7	Overcast
13:56	29.94	57.0	36.0	NNW	12.7	Overcast
14:56	29.92	60.1	37.0	North	11.5	Overcast
15:56	29.92	59.0	37.0	NNE	9.2	Overcast
16:56	29.91	60.1	37.9	NNE	9.2	Overcast
17:56	29.91	59.0	37.9	NNW	8.1	Mostly Cloudy

Source: National Weather Service, Louisville, Ky.

TABLE 3

**TO-15 DATA SUMMARY FOR GAS MONITORING
WELL SAMPLES AT THE LEE'S LANE LANDFILL
SAMPLING DATE: 02 APRIL 2004**

Sample ID	Well Samples						BLANK
	G1	G2	G3	G4	G5-L	G5-R	
Canister ID	RA2030	RA2035	HL2079	HL2097	HL2080	RA2036	RA2031
Dilution Factor	2.4883	NA	2.5392	2.5392	2.5923	2.3880	2.6643
Orifice	G-1	G-2	G-3	G-4	G5-L	G5-R	-
Compound (ppbV)							
Benzene	21.1	NA	ND	ND	0.19	0.09	0.09
Methylene chloride	0.46	NA	ND	ND	0.61	0.10	0.10
Toluene	0.16	NA	ND	0.04	0.46	0.09	0.09
Vinyl chloride	60.8	NA	ND	ND	ND	ND	ND
Xylene (Total)	ND	NA	ND	ND	0.10	ND	ND
Methane (ppmV)	20,300	NA	7.86	11.70	12.60	12.70	3.68

ND = Non-Detect

NA = Not Available (sample container failed acceptance criteria)